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Project Delivery Network

Design Leader QC Checklist

Version
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Introduction

The Project Delivery Network Design Leader QC Checklist is to be used with the UDOT QC/QA Procedure.   This checklist is a tool to assist the project team in verifying all work is produced with due diligence, using acceptable industry standard techniques, available resources and data, and reasonable decisions by competent professionals. The checklist is a tool for the delivery of quality documents and cannot replace the sound judgment and experience of competent professionals. It is the Design Team's responsibility to verify the quality of project documents **before** distribution.

Checklist Instructions

For each deliverable listed, the QC Checker is to verify all items listed in the checklist are complete, along with any additional items the QC Checker deems necessary. The checklist items are not to be interpreted as the only items that need to be verified.

Once all items are verified, the QC Checker is to sign the associated cover sheet and upload it onto ProjectWise. The QC is not complete until the cover sheet is signed, dated, and uploaded onto ProjectWise. See the Project Delivery Network QC/QA Procedure for the appropriate cover sheet.

QC reviews are to be completed **before** distribution.

The following explanations are to aid in completing the QC checklist items:

- A checklist item deemed "complete", "correct", or "accurate" does not denote that the item is perfect, but rather that the item satisfies design criteria based on known information, acceptable techniques, and sound judgment."
- A checklist item deemed "addressed" denotes the item as "reviewed all known concerns and verified the concerns are appropriately mitigated and satisfy design criteria." Addressed concerns are not necessarily incorporated into the design, but satisfactorily mitigated.
- A checklist item deemed "identified" denotes the item as "an acceptable and economical approach to satisfy design criteria based on known information."
- A checklist item deemed "verified" denotes the item as "verified the approach/conclusion as acceptable based on known information."
- Use the check boxes to verify the checklist items are complete. If a checklist item is *not applicable* to the current project, place an NA over the check box to denote the item as not applicable. This will allow the quality assurance to verify all items were addressed.
- Use the comment sections of the Cover Sheets to address exceptions, assumptions, and unique aspects of the project. The comments will help others understand why certain decisions were made and their impacts on the project.

Design Leader Checklist Instructions

A separate PDC is required for each roadway on the project. Complete the 1Y2 PDC checklist items for EACH roadway on the project. Use the 1Y2 PDC checklist for all updates.
The 4Y1 checklist is for the non-discipline specific plan sheets and special provisions only.

1Y2 Develop Project Design Criteria (PDC)

Develop the PDC.

References

1. AASHTO, A Policy on Geometric Design of Highways and Streets
2. UDOT Roadway Design Manual of Instruction
3. UDOT Project Design Criteria Website
4. Critical Elements
5. Additional Design Criteria
6. UDOT Project Delivery Network
7. UDOT QC/QA Procedures
8. UDOT Practical Design Guide

Develop PDC

1. ☐ The correct PDC is used (ie urban arterial, rural arterial, etc.)

2. ☐ All project description information is correct and matches ePM

   a. ☐ Project No.

   b. ☐ PIN

   c. ☐ Location

   d. ☐ Concept

   e. ☐ Project scope description

3. ☐ The Design Standards are correct

   a. ☐ Roadway Characteristics are correct

      i. ☐ Matches and addresses the findings of the OSR

   b. ☐ The Proposed Roadway Characteristics are correct

   c. ☐ All intersections are identified and characterized correctly

   d. ☐ All curb radius information is correct

   e. ☐ The pavement thickness information is correct based on known information.

4. ☐ All FHWA 13 Critical Elements and Additional Criteria are addressed and filled out correctly

   a. ☐ All critical elements are met as much as possible

   b. ☐ All additional criteria requiring design waivers are met as much as possible

   c. ☐ All exceptions and/or waivers are identified and adequately justified

5. ☐ The preparer's signature and date are on the form

4Y1 Prepare/Compile PS&E Review Package

Compile comment resolutions, project cost estimate, and all discipline review materials to produce the PS&E Review Package.

References

1. [UDOT CADD Standards](#)
2. [UDOT Plan Sheet Development Standards](#)
3. [Specification Writer's Guide](#)
4. [UDOT Project Delivery Network](#)
5. [UDOT QC/QA Procedures](#)
6. [UDOT Practical Design Guide](#)

Plan Set Sheets

1. ☐ All sheets meet *UDOT CADD Standards* and *UDOT Plan Sheet Development Standards*

    a. ☐ *PSDS General Plan Sheet Requirements* are followed (2)

    b. ☐ Call-out rules are followed

    c. ☐ All title blocks are filled out correctly

    d. ☐ All plan sheets are numbered correctly

    e. ☐ Plan Sheet CADD standards are followed and maintained on each sheet

2. ☐ **Title Sheet** is complete

    a. ☐ Title Sheet meets *UDOT Plan Sheet Development Standards* requirements

    b. ☐ Project number, name, description, funding source, and county are correct.

    c. ☐ Project name matches ePM screen 710 exactly.

    d. ☐ Correct length in miles

    e. ☐ Location map and north arrow are correct

    f. ☐ All text is correct

3. ☐ **Cross Reference Sheet** is complete

    a. ☐ Cross Reference Sheet meets *UDOT Plan Sheet Development Standards* requirements

    b. ☐ Sheet number is 1-A.

    c. ☐ Sheet numbers and names match actual sheets in plans.

    d. ☐ Structure sheets included on the index sheet.

    e. ☐ Index for all applicable Supplemental Standard Drawings are included.

    f. ☐ For small projects, put the index to standard drawings on the title sheet

    g. ☐ All text is correct

4. ☐ **Index Sheet** is complete

        a. ☐ Index Sheet meets *UDOT Plan Sheet Development Standards* requirements

        b. ☐ All stations are legible.

        c. ☐ The project flags are visible.

        d. ☐ The sheet numbers & names match the index.

        e. ☐ All major structures correctly identified.

        f. ☐ All mile posts correctly identified.

        g. ☐ All text is correct

5. ☐ **Abbreviations and Legend Sheet** is complete

        a. ☐ Abbreviations and Legend Sheet meets *UDOT Plan Sheet Development Standards* requirements

        b. ☐ All text is correct.

        c. ☐ All appropriate abbreviations and legends are included.

6. ☐ **General Notes Sheet** is complete

        a. ☐ General Notes meets *UDOT Plan Sheet Development Standards* requirements

        b. ☐ All text is correct

7. ☐ The non-discipline specific **Special Provisions** are complete

        a. ☐ All non-discipline specific special provisions needed are prepared

        b. ☐ All special provisions conform to the *Specification Writer's Guide* (verify using Chapter 11 Checklist)

        c. ☐ All general and project specific special provision content is accurate, complete, and does not contain anything unnecessary